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Washington, DC 20515-2107

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The Honorable Spencer Abraham
Secretary
Department of Energy
Washington, D.C. 20585

Dear Mr. Secretary:

I am writing you regarding press reports suggesting that a Department of Energy funded or supported study may have understated the public safety consequences of a terrorist attack or an accident involving liquefied natural gas (LNG) tankers and the Distrigas LNG facility, which is located in the City of Everett, which I represent.

As you may recall, shortly after the September 11th terrorist attacks, the Department of Energy commissioned a study by Quest Consultants, Inc. regarding public safety issues relating to the transportation of LNG to the Distrigas facility and the storage of LNG at the facility. Secretary of Transportation Mineta wrote me about the study on October 26, 2001, noting that:

"Quest Consultants, Inc., has been hired by DOE [the Department of Energy] to perform studies related to security on vessels transporting LNG and on the onshore LNG storage tanks."

On page 10 Secretary Mineta indicated that:

"Quest Consultants, an engineering firm, has been asked by DOE to perform a study to analyze the threat that could result from a five-meter diameter hole in an LNG tank on a vessel. Quest has performed some initial calculations to quantify the gas dispersion and fire scenarios that could follow a large release from the LNG storage tanks."

Also on page 10, Secretary Mineta further stated that in addition to actions undertaken by the Department of Transportation to enhance security at the Distrigas facility, it was your understanding that:

"To improve security measures, DOE will work directly with the local law enforcement officials and Distrigas. MEMA [Massachusetts Emergency Management Agency] will review the studies performed by Quest and develop a plan of action. RSPA [the Department of Transportation's Research and Special

Projects Administration] will be involved in the review of the onshore plant protection security features.

My office was subsequently provided with a copy of the Quest study and briefed on its contents. This Quest study, along with a study prepared for the facility operator by Lloyd's Register of Shipping, which my office was also provided, has been used by the federal government and the facility operator to minimize the potential danger of a fire and explosion at or near the Distrigas facility to the residents of Everett and surrounding communities.

Recent press reports have called the accuracy of these studies into question and suggested that a more recent draft study being prepared by NOAA suggests that the public safety consequences of a terrorist attack or accident at or near the Distrigas facility could be far more severe. An October 19, 2003 article in the Mobile Register quotes John Cornwell, the lead scientists on the Quest study of LNG fires, as stating:

"Some of the modeling we did for DOE – in hindsight, we should have done a more complete paper. ...I've learned you never write anything you don't want public. We violated our own rules on that score."

The Register article goes on to report that Cornwell did the Quest study on short notice and that he was believed that it would be employed in-house by federal agencies as one of several tools used to examine LNG fire scenarios. However, according to the Register article:

"In Boston, the Quest study – which has never been published in scientific journals – was apparently used by the DOE to suggest that a terrorist attack on an LNG tanker would result in only limited damage immediately around the ship. In stark contrast, published scientific studies have suggested that an LNG fire could have disastrous consequences for densely populated neighborhoods around Boston Harbor."

An article in today's Boston Herald further suggests that the Quest study also was used by the Coast Guard to justify the resumption of LNG shipments in the months after the September 11th attacks. This report also indicates that a forthcoming study by the National Oceanic and Atmospheric Administration (NOAA) indicates that the size of the fire that could result from a successful attack against an LNG tanker in Boston Harbor or at the Distrigas facility could be far greater than that assumed by either the Quest Study or the Lloyd's study prepared for Distrigas. . According to an email I have obtained that was written by William Lehr, the author of the NOAA study:

"The maximum emissive power of an LNG pool fire is several times more than we would expect from a regular oil fire. However, the thermal radiation received falls off rapidly as you move away from the fire. It decreases much faster for foggy days than for clear days. A common danger level for thermal radiation flux in an area of public assembly is 5 kilowatts per square meter. A person exposed to

this level would feel considerable pain in a few seconds. A very large unconfined LNG pool fire could possibly produce thermal radiation effects at this level or above for more than a kilometer away from the center of the fire.”

At the same time, Department of Energy officials quoted in the aforementioned Mobile Register article have denied any connection to the Quest Study, stating that the Department “did not commission or release the study” and was “not involved” with the study in any way. This is a rather bizarre and Orwellian rewriting of history.

I am writing you at this time to request your assistance and cooperation in responding to the following questions:

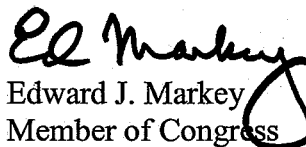
1. Is it the Department’s understanding that the Quest Study was performed for the Department of Energy? If not, how do you explain why the Secretary of Transportation told me that it was, why it is cited in the DOE presentation available at this website (http://www.borderpowerplants.org/pdf_docs/DOE_LNG_accident_impact_2002.pdf), or why did the Federal Energy Regulatory Commission cite the Quest study as having been performed for DOE in a recent Environmental Impact Statement FERC filed for the proposed Hackberry terminal? If, so, what is your understanding of origins and purpose of this study?
2. Was DOE press officer Drew Malcomb inaccurate or misleading when he stated to a reporter that DOE “did not commission or release the [Quest] study,” was “not involved” in the study in any way, and that “The DOE member who told you [the reporter] that DOE was involved was misinformed. We were not involved.”? If not, how do you account for the DOT’s, the FERC’s, and the DOE viewgraph presentation all having suggested that the Quest study was, in fact, performed at the request of DOE?
3. Please provide me with a copy of all contracts the Department has entered into with Quest Consultants, Inc. within the last five years which involve liquefied natural gas, as well as copies of all deliverables submitted to the Department pursuant to such contracts and all progress reports submitted by the contractor summarizing work being performed pursuant to the contract.
4. How has the Department made use of the Quest Study in connection with its responsibilities regarding the siting and safety of LNG facilities and the transportation of LNG to such facilities? If so, please explain exactly how the Quest study has been used.
5. Does the Department agree with the statement attributed in the press to Mr. John Cornwell, the lead scientist for the Quest study, that the Quest numbers are not appropriate “for many of the things they are being used for,” including use in an Environmental Impact Statement for a proposed new LNG facility?
6. Did the Department base any regulatory, oversight, or enforcement actions or decisions on the accident scenarios or accident consequences set forth in the Quest report or the Lloyd’s report? If so, does the Department intend to revisit any of those actions or decisions or impose any new security and safety requirements on the facility operator or upon LNG tankers entering Boston

Harbor to dock at the Distrigas facility? If not, what other studies or analyses did the Department base its post-September 11th actions or decisions upon?

7. The aforementioned press accounts raise serious questions about the adequacy of the Quest study, indicating that it has not been peer reviewed and is contracted by other scientific studies of LNG fires and explosions. Are you familiar with these concerns that have been raised about this non-peer reviewed study, and if so, do you believe that it should not be used as a basis for policy decisions with respect to LNG safety?
8. The aforementioned press reports also indicate that a draft NOAA study projects hypothetical LNG fires that are much larger than those projected in either the Quest or Lloyd's reports. According to the Herald, "NOAA's study...generally sides with a more devastating scenario long portrayed by Massachusetts Institute of Technology emeritus James Fay, said Bill Leher, a researcher on the NOAA study." The Register article further suggests that the NOAA study may be more in line with other scientific studies that have been done on this subject. Are you familiar with the NOAA study? Do you agree or disagree with its conclusions? Do you agree or disagree that the NOAA study, and the Fay studies, appear to be more in line with the scientific and technical literature on this subject. If you agree, please indicate whether you intend to make any changes in the Department's oversight or regulatory policies or actions based on this new study. If you disagree, please explain the basis for your disagreement.

Thanks again for your cooperation in this matter. I request that a response to this inquiry be provided to me within 10 working days, or no later than November 24, 2003. If you have any questions about this matter, please have your contact Mr. Jeff Duncan of my staff at 202-225-2836.

Sincerely,


Edward J. Markey
Member of Congress